

# 70100

SEARCH REQUEST FORM  
Scientific and Technical Information Center

Examiner# : Urszula Cegielnik 77064  
Art Unit : 3712  
Phone Number: 306-5806  
Date: 07/02/2002  
Serial Number: 09/771,919  
MailBox & Bldg/Room Location: CP2 10C02  
Results Format Preferred (circle): Paper Disk E-mail

JUL - 2 2002

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Expression-varying device

Inventors (please provide full names): Albert L. Maggiore, Toshinobu Ishii,

~~Kenji Karasawa and Hideyoshi Karasawa~~

\*\*\*\*\*  
STAFF USE ONLY

## Type of Search

## Vendors and cost where applicable

Searcher: JEANNE HARRIGAN  
Searcher Phone #: 305-5934  
Searcher Location: CP2-2008  
Date Searcher Picked Up: 7/17  
Date Completed: 7/17  
Searcher Prep & Review Time: 179  
Clerical Prep Time: \_\_\_\_\_  
Online Time: 51

NA Sequence (#)	STN
AA Sequence (#)	Dialog <input checked="" type="checkbox"/>
Structure (#)	Questel/Orbit
Bibliographic <input checked="" type="checkbox"/>	Dr.Link
Litigation	Lexis/Nexis
Fulltext	Sequence Systems
Patent Family	WWW/Internet <input checked="" type="checkbox"/>
Other	Other (specify)

10:35 - 255

5/7/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.  
014102828 \*\*Image available\*\*  
WPI Acc No: 2001-587042/200166

**Expression change device for doll toy, has arm connected to connection shaft of pupils, which swings coordinating with groove provided to rod swing mechanism, so that connection rod swings correspondingly to rotate pupils**

Patent Assignee: FISHER-PRICE INC (FIPR ); SENTE CREATIONS KK (SENT-N); ISHII T (ISHI-I); KANAGAWA K (KANA-I); KARASAWA H (KARA-I); MAGGIORE A P (MAGG-I)

Inventor: ISHII T ; KANAGAWA K ; KARASAWA H ; MAGGIORE A P

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001239068	A	20010904	JP 200052423	A	20000228	200166 B
US 20020019193	A1	20020214	US 2001771919	A	20010130	200214

Priority Applications (No Type Date): JP 200052423 A 20000228

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

JP 2001239068	A		9	A63H-003/40	
---------------	---	--	---	-------------	--

US 20020019193	A1			A63H-003/36	
----------------	----	--	--	-------------	--

Abstract (Basic): JP 2001239068 A

NOVELTY - A connection rod swing mechanism (B) has a disc (14) provided with a groove (15) and an arm (16) connected to the connection shaft (22) of pupils (7). A spring (23) energizes the arm such that end of the connection shaft always abuts the bottom of the groove. The end of arm swings coordinating with the groove and the connection rod (25) of pupils swings correspondingly to rotate the pupils.

USE - For changing the expressions of doll toy, animal toy, etc. by the activities of eye and eyebrows.

ADVANTAGE - Expression is easily and simply changed by closing and opening the eyes, by rotating the arm corresponding to the groove of the disc.

DESCRIPTION OF DRAWING(S) - The figure shows an exploded perspective view of the expression change device.

Pupil (7)

Disc (14)

Groove (15)

Arm (16)

Connection shaft (22)

Spring (23)

Connection rod (25)

Connection rod swing mechanism (B)

pp; 9 DwgNo 2/10

Derwent Class: P36; P62; W04

International Patent Class (Main): A63H-003/36; A63H-003/40

International Patent Class (Additional): A63H-003/44; A63H-013/02; B25J-005/00

File 350:Derwent WPIX 1963-2002/UD,UM &UP=200245

File 344:CHINESE PATENTS ABS MAY 1985-2002/MAY

File 357:Derwent Biotech Res. 1982-2002/June W1

File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
-----	-------	-------------

S1	5	AU='MAGGIORE':AU='MAGGIORE A P'
----	---	---------------------------------

S2	923	AU='ISHII T'
----	-----	--------------

S3	23	AU='KANAGAWA K'
----	----	-----------------

S4	91	AU='KARASAWA H'
S5	1	S1 AND S2 AND S3 AND S4
S6	1037	S1:S4 NOT S5
S7	52150	EYE OR EYES OR EYEBALL? ? OR EYEBROW? ?
S8	3	S6 AND S7 [not relevant]
S9	116225	EXPRESSION
S10	17	S6 AND S9
S11	17	S10 NOT S8 [not relevant]

File 348:EUROPEAN PATENTS 1978-2002/Jul W01

File 349:PCT FULLTEXT 1983-2002/UB=20020711,UT=20020704

Set	Items	Description
S1	2	AU='MAGGIORE ALBERT P'
S2	2	AU='KARASAWA HIDEYASU C O DIGITAL LAB CORP':AU='KARASAWA H- IDEYASU GREENPARK MINAMINAGAREYAMA 7'
S3	0	S1 AND S2
S4	4	S1:S2 [not relevant]

15/7/2 (Item 2 from file: 583)

DIALOG(R) File 583:Gale Group Globalbase(TM)

(c) 2002 The Gale Group. All rts. reserv.

04610067

A Tec Toy investe no mercado externo e vende videogames para a/

ARGENTINA - TEC TOY EXPORTS VIDEOGAMES

Gazeta Mercantil (GM) 2 October 1991 p10

Language: Brazilian

Tec Toy (Brazil), electronic toy maker, has begun exporting videogames to Argentina. The company has exclusive marketing rights for Sega (Japan) videogames in Mercosul countries. Exports to Argentina, Paraguay and Uruguay are expected to lift national production by 30%. In 1990, the company reported USD1r119 mil turnover, with an increase of 20% forecast for 1991. During FY1990/91, Tec Toy invested USD1r10 mil on new products, with an ad spend of USD1r10 mil planned for 1991 alone. **Some of the products to be launched shortly include: Natasha, an electronic doll which talks, laughs, cries, and moves her eyes and mouth; together with seven Nikko cars; twelve minigames; two Pense Bem books; and 15 new videogames.**

File 94:JICST-EPlus 1985-2002/May W4

File 96:FLUIDEX 1972-2002/Jul

File 99:Wilson Appl. Sci & Tech Abs 1983-2002/Jun

File 108:Aerospace Database 1962-2002/Jun

File 238:Abs. in New Tech & Eng. 1981-2002/Jul

File 35:Dissertation Abs Online 1861-2002/Jun

File 32:METADEX(R) 1966-2002/Aug B1

File 111:TGG Natl.Newspaper Index(SM) 1979-2002/Jul 17

File 583:Gale Group Globalbase(TM) 1986-2002/Jul 17

File 6:NTIS 1964-2002/Jul W4

File 8:Ei Compendex(R) 1970-2002/Jul W1

File 14:Mechanical Engineering Abs 1973-2002/Jul

File 34:SciSearch(R) Cited Ref Sci 1990-2002/Jul W2

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

File 65:Inside Conferences 1993-2002/Jul W2

File 77:Conference Papers Index 1973-2002/Jul

Set	Items	Description
-----	-------	-------------

S1 241906 EYE OR EYES OR EYEBALL? ? OR EYEBROW? ?  
S2 29771 DOLL OR DOLLS OR TOY? ? OR PUPPET? ? OR MARIONETTE? OR MAR-  
IONNETTE?  
S3 585629 MOTOR?  
S4 7462 POWER() (UNIT OR UNITS)  
S5 664982 PIVOT???? OR TURN????  
S6 606514 SWING???? OR ROTAT????  
S7 330 S1 AND S2  
S8 9 S3 AND S7  
S9 0 S4 AND S7  
S10 24 S5:S6 AND S7  
S11 1 S8 AND S10 [not relevant]  
S12 554166 MOVE? ? OR MOVING OR MOVABLE OR MOVEABLE  
S13 28 S12 AND S7  
S14 3 S13 AND S5:S6  
S15 3 S14 NOT S11  
S16 1 S3 AND (S10 OR S13) [not relevant]

13/6,K/1 (Item 1 from file: 47)  
DIALOG(R)File 47:(c) 2002 The Gale group. All rts. reserv.  
05952747 SUPPLIER NUMBER: 67340281 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
There's a lot of smart electronics INSIDE A FURBY.  
Dec, 2000  
WORD COUNT: 1970 LINE COUNT: 00150  
... port, then you have state-of-the-art in a very unassuming package  
indeed!

The Toy . The Furby is a fur-covered pseudo-animal with fixed feet  
and a movable mouth, ears, and eyes . In addition, the Furby can rock  
forward on its base platform. The movable parts of the toy are  
mechanically driven by an internal electric motor (more on this in a  
moment) that operates the eyelids, opens and close the mouth...

18/8/7 (Item 7 from file: 16)  
DIALOG(R)File 16:(c) 2002 The Gale Group. All rts. reserv.  
07020395 Supplier Number: 59352136 (USE FORMAT 7 FOR FULLTEXT)  
Mattel, Inc. Showcases The Hottest Toys at the 2000 American International  
Toy Fair in New York City!  
Feb 11, 2000  
Word Count: 1215  
PUBLISHER NAME: PR Newswire Association, Inc.  
COMPANY NAMES: \*Mattel Inc.  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*3944000 (Games, Toys & Children's Vehicles)  
INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)  
SIC CODES: 3944 (Games, toys, and children's vehicles)  
NAICS CODES: 339932 (Game, Toy, and Children's Vehicle Manufacturing)  
TICKER SYMBOLS: MAT  
SPECIAL FEATURES: LOB; COMPANY

18/8/15 (Item 15 from file: 20)  
DIALOG(R)File 20:(c) 2002 The Dialog Corp. All rts. reserv.  
04727632 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Enter the dragon  
March 23, 1999  
WORD COUNT: 2410

Serial 09/771919  
Searcher: Jeanne Horrigan  
July 17, 2002

4

18/8/17 (Item 17 from file: 20)  
DIALOG(R)File 20:(c) 2002 The Dialog Corp. All rts. reserv.  
03566771 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Toy Store Shelves Well Stocked with Technology  
November 26, 1998  
WORD COUNT: 931  
DESCRIPTORS: New Products & Services; Marketing; Company News; Science  
& Technology; General News  
COUNTRY NAMES/CODES: United States of America (US)  
REGIONS: Americas; North America; Pacific Rim  
SIC CODES/DESCRIPTIONS: 3571 (Electronic Computers); 5945 (Hobby Toy &  
Game Shops)

18/8/32 (Item 32 from file: 141)  
DIALOG(R)File 141:(c) 2002 The HW Wilson Co. All rts. reserv.  
03060293 H.W. WILSON RECORD NUMBER: BRGA95060293 (USE FORMAT 7 FOR  
FULLTEXT)  
{Toy story (motion picture review)}.  
WORD COUNT: 4366  
DESCRIPTORS:  
Motion picture reviews--Single works  
NAMED PERSONS: Lasseter, John.  
Sept. 18 '95 (19950918)

18/8/35 (Item 35 from file: 635)  
DIALOG(R)File 635:(c) 2002 ProQuest Info&Learning. All rts. reserv.  
0551934 95-07279  
Playing with toys is serious work: Robert B. Fuhrer's life revolves around  
games  
PUBL DATE: 941205  
WORD COUNT: 1,577  
DATELINE: New York, NY, US  
COMPANY NAMES: Robert B Fuhrer Enterprises, New York, NY, US, SIC:7389,  
CLASSIFICATION CODES: 8300 (Service industries not elsewhere classified);  
8600 (Manufacturing industries not elsewhere classified); 2130  
(Executives)  
DESCRIPTORS: Service industries; Toy industry; Entrepreneurs; Personal  
profiles; Middle Atlantic  
NAMED PERSONS: Fuhrer, Robert B  
SPECIAL FEATURE: Photo

18/8/42 (Item 42 from file: 47)  
DIALOG(R)File 47:(c) 2002 The Gale group. All rts. reserv.  
03554211 SUPPLIER NUMBER: 10852989 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Working the bugs out of a new breed of 'insect' robots. (robots that behave  
like insects)  
June, 1991  
WORD COUNT: 3970 LINE COUNT: 00296  
SPECIAL FEATURES: illustration; photograph  
DESCRIPTORS: Massachusetts Institute of Technology. Artificial  
Intelligence Laboratory.--Research; Artificial life--Research; Robots--  
Research; Computers--Research

18/8/47 (Item 47 from file: 148)  
DIALOG(R)File 148:(c)2002 The Gale Group. All rts. reserv.

Serial 09/771919  
Searcher: Jeanne Horrigan  
July 17, 2002

5

02820495 SUPPLIER NUMBER: 04121036 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
What's new under the sun in 1986. (toy industry)  
Feb, 1986  
WORD COUNT: 25041 LINE COUNT: 01936  
SPECIAL FEATURES: illustration; photograph  
INDUSTRY CODES/NAMES: RETL Retailing; SPRT Sports, Sporting Goods and Toys  
DESCRIPTORS: Toy industry--Forecasts  
SIC CODES: 3944 Games, toys, and children's vehicles; 5945 Hobby, toy,  
and game shops

18/3,AB/8  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2002 The Gale group. All rts. reserv.  
05529396 SUPPLIER NUMBER: 58398818 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**It Smiles, it Frowns -- it's a Robot!**  
Whynott, Douglas  
Science World, 56, 7, 8  
Dec 13, 1999  
ISSN: 1041-1410 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1592 LINE COUNT: 00126

18/3,AB/9  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2002 The Gale group. All rts. reserv.  
05452542 SUPPLIER NUMBER: 55926976 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
The Robot That Loves People. (**Cynthia Breazeal builds robot called Kismet  
that expresses emotion and interacts with humans**) (includes related  
article on real-world robots)  
WHYNOTT, DOUGLAS; Saunders, Fenella  
Discover, 20, 10, 66  
Oct, 1999  
ISSN: 0274-7529 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 2983 LINE COUNT: 00226

18/3,AB/31  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2002 The Gale group. All rts. reserv.  
02732796 SUPPLIER NUMBER: 03901976 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Toying with success. (high-tech teddy bears)**  
Financial World, v154, p12(1)  
Aug 21, 1985  
CODEN: FIWOA ISSN: 0015-2064 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
WORD COUNT: 331 LINE COUNT: 00026

18/3,AB/38  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2002 The Gale Group. All rts. reserv.  
08163492 SUPPLIER NUMBER: 17278145 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Steve Jobs' amazing movie adventure. (working with Disney to create Pixar's  
Toy Story animated Christmas movie) (Information Technology Special Report)  
Schlender, Brent  
Fortune, v132, n6, p155(7)  
Sep 18, 1995  
ISSN: 0015-8259 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 4036 LINE COUNT: 00315  
ABSTRACT: Steven Jobs' Pixar Inc is preparing to launch the first

completely computer-designed 3D animation motion picture entitled 'Toy Story' for the fall and Christmas movie seasons. The movie, which will be distributed by Walt Disney, is a milestone in the motion picture industry because it relies completely on computer-based animation systems for its production, direction and screen-play. The movie could dramatically change the economics of animated movies. It is expected to be a major hit for both Pixar and Disney. The movie is also unique because all of its characters, sets and props have been stored in Pixar's computer systems, which will allow the company to rearrange characters and scenes at will for spinoffs, commercials or sequels. The movie could also represent Jobs' return to the forefront of the technology arena, a position that he has not held since he left Apple in 1985. It is estimated that Jobs has sunk millions of dollars into Pixar, which has yet to turn a profit.

18/3,AB/49

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2002 The Gale Group. All rts. reserv.

12749930 SUPPLIER NUMBER: 66579063 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Toys are growing up.

MAYHEW-SMITH, ALEX

Electronics Weekly, 36

Oct 25, 2000

ISSN: 0013-5224

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 866

LINE COUNT: 00067

18/3,AB/2

DIALOG(R)File 484:Periodical Abs Plustext

(c) 2002 ProQuest. All rts. reserv.

01721751 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Toys that teach

Jones, Lisa C

Ebony (GEBO), v49 n1, p56-66, p.6

Nov 1993

ISSN: 0012-9011

JOURNAL CODE: GEBO

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1160

LENGTH: Long (31+ col inches)

ABSTRACT: Responding to the pleas of black parents who want more culturally sound toys and gift items on the holiday shelves, an increasing number of toy manufacturers and major retailers are producing new, alternative and supplemental playthings that specifically target African-American youngsters. Several of these new toys, including Pleasant Co's Addy Walker doll, Playschool's Kids of Color Rag Doll and Olmec's superhuman Sun-Man, are discussed.

18/3,AB/1

DIALOG(R)File 16:Gale Group PROMT(R)

(c) 2002 The Gale Group. All rts. reserv.

08379802 Supplier Number: 68660382

Talky toys listen up!

Higgins, Amy

Machine Design, v72, n23, p60

Dec 7, 2000

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 2854

File 9:Business & Industry(R) Jul/1994-2002/Jul 16  
File 16:Gale Group PROMT(R) 1990-2002/Jul 17  
File 47:Gale Group Magazine DB(TM) 1959-2002/Jul 17  
File 80:TGG Aerospace/Def.Mkts(R) 1986-2002/Jul 17  
File 141:Readers Guide 1983-2002/Jun  
File 148:Gale Group Trade & Industry DB 1976-2002/Jul 17  
File 160:Gale Group PROMT(R) 1972-1989  
File 481:DELPHES Eur Bus 95-2002/Jun W5  
File 482:Newsweek 2000-2002/Jul 11  
File 484:Periodical Abs Plustext 1986-2002/Aug W1  
File 621:Gale Group New Prod.Annou.(R) 1985-2002/Jul 17  
File 635:Business Dateline(R) 1985-2002/Jul 17  
File 636:Gale Group Newsletter DB(TM) 1987-2002/Jul 17  
File 646:Consumer Reports 1982-2002/Jul  
File 610:Business Wire 1999-2002/Jul 17  
File 613:PR Newswire 1999-2002/Jul 17  
File 810:Business Wire 1986-1999/Feb 28  
File 813:PR Newswire 1987-1999/Apr 30  
File 609:Bridge World Markets 2000-2001/Oct 01  
File 649:Gale Group Newswire ASAP(TM) 2002/Jul 17  
File 112:UBM Industry News 1998-2002/Jul 17  
File 95:TEME-Technology & Management 1989-2002/Jul W2  
File 20:Dialog Global Reporter 1997-2002/Jul 17  
Set Items Description  
S1 1630346 EYE OR EYES OR EYEBALL? ? OR EYEBROW? ?  
S2 617302 DOLL OR DOLLS OR TOY? ? OR PUPPET? ? OR MARIONETTE? OR  
MARIONNETTE?  
S3 2873551 MOTOR?  
S4 26702 POWER() (UNIT OR UNITS)  
S5 6351590 PIVOT???? OR TURN????  
S6 667803 SWING???? OR ROTAT?????  
S7 7531388 MOVE? ? OR MOVING OR MOVEABLE OR MOVABLE  
S8 10892 S1(S)S2  
S9 2894638 S3:S4  
S10 12569309 S5:S7  
S11 44898 S10(3N)S1  
S12 3 S8(S)S9(S)S11  
**S13 2 RD (unique items)**  
S14 92 (S8 AND S9 AND S11) NOT S12  
S15 62 RD (unique items)  
S16 11 S15/2002 OR S15/2001  
S17 51 S15 NOT S16  
**S18 51 Sort S17/ALL/PD,D**

15/7/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014510594 \*\*Image available\*\*

WPI Acc No: 2002-331297/200237

**Method and device for identifying the position of people/objects and for positive tracking of pupils and irises in mannequins, toy dolls or toy animals uses plastic animated eyeballs in such dolls to attract attention.**

Patent Assignee: WOELFLINGSSEDER H (WOEL-I)

Inventor: WOELFLINGSSEDER H



Serial 09/771919  
Searcher: Jeanne Horrigan  
July 17, 2002

8

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 10131879	A1	20020221	DE 1031879	A	20010704	200237 B

Priority Applications (No Type Date): DE 1032452 A 20000706

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 10131879	A1	5	A63H-003/38	

Abstract (Basic): DE 10131879 A1

NOVELTY - A person (1) as a reference point appears in front of a doll 's head (2) and body (3). **Eyeballs (4) visibly fitted in eye sockets move horizontally to and fro with a motor (8) using a sensor (7) with a directional characteristic (7a) via a transmission (5) on a common axle (6).** A flexible cable (9) feeds the sensor's measured variable to a controller with a voltage supply (10).

USE - For responsive doll eye mechanisms supported by optical PIR, PSD, ultrasonic and radar sensors as well as CCD cameras.

ADVANTAGE - The controller tracks the pupils with irises and the sensor step by step in the direction of the largest measured variable of people and objects recognized in the sensor's range of detection.

DESCRIPTION OF DRAWING(S) - The drawing shows the components of the present invention in perspective with a direct mechanical coupling in front of the person used as a reference point.

Person as a reference point (1)

Doll 's head (2)

Doll 's body (3)

Eyeballs (4)

Motor (8)

Sensor (7)

Directional characteristic (7a)

Transmission (5)

Common axle (6)

Flexible cable (9)

Voltage supply (10)

pp; 5 DwgNo 1/2

Derwent Class: P36; T01; W04

International Patent Class (Main): A63H-003/38

15/7/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

014405553 \*\*Image available\*\*

WPI Acc No: 2002-226256/200228

**Light sensitive toy for computer monitor has motor moving eye images behind faceplate apertures**

Patent Assignee: MATTEL INC (MATV )

Inventor: TRAGESER M

Number of Countries: 022 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200158553	A1	20010816	WO 2001US4268	A	20010208	200228 B
AU 200136846	A	20010820	AU 200136846	A	20010208	200228

Priority Applications (No Type Date): US 2000502604 A 20000211

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200158553	A1 E	12	A63H-003/00	

Designated States (National): AU CA MX  
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
MC NL PT SE TR

AU 200136846 A A63H-003/00 Based on patent WO 200158553

Abstract (Basic): WO 200158553 A1

NOVELTY - Toy comprises a housing resting on the monitor (31) with an aperture, downward extending portion (16), faceplate (11) with **eye apertures (12,13), movable eye plate with sliding eye images (14,15), a motor with gearing to move the eye plate behind the apertures,** a light sensor in the extending part and a motor controller energizing the motor in response to the light sensor.

USE - Toy is for computer monitors.

ADVANTAGE - Toy does not need to be connected to the computer.

DESCRIPTION OF DRAWING(S) - The figure shows the toy on the monitor with

faceplate (11)  
eye apertures (12,13)  
sliding eye images (14,15)  
downward extending portion (16)  
monitor (31)  
pp; 12 DwgNo 1/4

Derwent Class: P36; T01; T04; W04

International Patent Class (Main): A63H-003/00

International Patent Class (Additional): A63H-003/40 ; A63H-030/04

15/7/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

012553052 \*\*Image available\*\*

WPI Acc No: 1999-359158/199931

**Dancing doll with multi-sectional body**

Patent Assignee: YU J H. (YUJH-I)

Inventor: YU J H

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 29902724	U1	19990617	DE 99U2002724	U	19990216	199931 B
GB 2347092	A	20000830	GB 994411	A	19990225	200045 N

Priority Applications (No Type Date): DE 99U2002724 U 19990216; GB 994411 A 19990225

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 29902724	U1	14		A63H-011/18	
GB 2347092	A			A63H-013/00	

Abstract (Basic): DE 29902724 U1

NOVELTY - The doll has a multi-sectional body (3) and an actuating mechanism (4). Legs (1,2), feet (10,20), top, left, and right **body sections (30,31,32), are pivotally connected to each other, and are similarly connected to the mechanism via pivot eyes (410).** The mechanism has a transmission casing (41), a motor (40), and a turntable (42), and top and lower triangular pivot levers (43,44). Slide and guide journals (420,432) move in guide slots (411,431).

ADVANTAGE - Doll 's body can move when dancing, giving more human-like and more interesting effects.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective front view of doll .

legs (1,2)  
body (3)  
actuating mechanism (4)  
feet (10,20)  
body sections (30,31,32)  
motor (40)  
transmission casing (41)  
turntable (42)  
levers (43,44)  
pivot eyes (410)  
guide slots (411,431)  
guide/slide journals (420,432)  
pp; 14 DwgNo 3/6

Derwent Class: P36

International Patent Class (Main): A63H-011/18; A63H-013/00

International Patent Class (Additional): A63H-003/00; A63H-003/20; A63H-003/36

15/7/4 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

012298790 \*\*Image available\*\*

WPI Acc No: 1999-104896/199909

**Animated character singing doll - moves lower lip and eye balls synchronizing with audio signals fed to speakers as drive motors are actuated correspondingly**

Patent Assignee: PRAGMATIC DESIGNS INC (PRAG-N)

Inventor: TRUCHSESS J F

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5855502	A	19990105	US 97801198	A	19970218	199909 B
TW 339280	A	19980901	TW 97109040	A	19970627	199909
CA 2229757	A	19980818	CA 2229757	A	19980217	199909

Priority Applications (No Type Date): US 97801198 A 19970218

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5855502	A		11	A63H-003/28	
TW 339280	A			A63H-003/28	
CA 2229757	A			A63H-003/28	

Abstract (Basic): US 5855502 A

The doll has a vertical divided trunk with a face (12) mounted in the upper division (11). The face unit includes two pivoted eye balls (32) and a pivoted lower lip (34), which are driven by a pair of motors (42,50) arranged inside a gear case of a face mechanism (40). The eye balls are operated through rotatable drum (46) having a helical cam (45) that contacts a reciprocating bar (48). The lip is actuated through a gear train (52,53) attached to a spring holder, that holds the lower lip through links to move it down upward and downward. The spring holder has a spring (54) that opposes the action of motor , to automatically close the lip when the motor is not driven.

A speaker (20) is arranged below the face unit. A control circuit is arranged in the lower portion of the trunk to generate audio signals and control signals for the motors . A battery is arranged in the lower portion with the switch to supply power to the motor and the control circuit. The drive of motors are controlled such that the movement of lips and eyeballs synchronises with the audio signals fed to the speakers. The trunk and the face units are arranged inside a

tree limbs (14) to simulate a tree.

USE - For animated advertising sign, singing tree structure.

ADVANTAGE - Increases interest to watch doll, as movement of lips and eyeballs are synchronised with the audio.

Dwg.1,6/8

Derwent Class: P36; W04; W05

International Patent Class (Main): A63H-003/28

International Patent Class (Additional): A63H-003/40

15/7/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

011959639 \*\*Image available\*\*

WPI Acc No: 1998-376549/199832

**Eye ball assembly for a toy - has an eye ball mounted in a housing, the eye ball being moved by means of an off-set pin on a rotating disc set within the housing**

Patent Assignee: KO L C (KOLC-I)

Inventor: KO L C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5769687	A	19980623	US 97823340	A	19970324	199832 B

Priority Applications (No Type Date): US 97823340 A 19970324

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5769687	A	5	A63H-003/40	

Abstract (Basic): US 5769687 A

A toy eye comprises an eye ball (12) that rotates in a housing. The rear of the housing has a rotating disc (32) with an offset pin (321) that engages with the rear of the eye ball. The disc is connected to a wire (31) that runs from the rear of the housing so that when rotated the eye ball moves in the housing. The wire may run down a flexible tube (21) to a motor (40) and gearbox (41,33) that rotates the eye ball

USE - Provides a rotatable eyeball for child's toys

ADVANTAGE - the eye ball may be rotated and stopped at any desired position.

Dwg.1,3/4

Derwent Class: P36

International Patent Class (Main): A63H-003/40

15/7/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

011388413 \*\*Image available\*\*

WPI Acc No: 1997-366320/199734

**Crawling doll for children - has internal, battery-powered mechanisms which open and close eyes and move mouth and arms to simulate waking and sleeping movements**

Patent Assignee: ONILCO INNOVACION SA (ONIL-N)

Inventor: LLORENS J F; LLORENS J F

Number of Countries: 003 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2743000	A1	19970704	FR 9616352	A	19961227	199734 B
ES 2115511	A1	19980616	ES 952530	A	19951227	199830
US 5833513	A	19981110	US 96777210	A	19961227	199901

ES 2115511 B1 19990216 ES 952530 A 19951227 199914  
Priority Applications (No Type Date): ES 952530 A 19951227

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2743000	A1		17	A63H-003/20	
ES 2115511	A1			A63H-003/20	
US 5833513	A			A63H-013/00	
ES 2115511	B1			A63H-003/20	

Abstract (Basic): FR 2743000 A

The doll includes a head (2), arms (3) and a body (4). A mechanism is positioned inside the doll. A top part with a central groove is used to control movement of the doll's eyes (13). There is also a mechanism for moving the doll's mouth. The mechanisms include motors which are powered by a battery.

A sound mechanism outputs different noises according to the position and movement of the doll. The arms are moved up and down in response to a moving element through a connecting rod. An eccentric gear (20) moves so as to act directly on a slider and operated the moving element.

ADVANTAGE - Versatile. Compact mechanism. Co-ordinates different actions.

Dwg.1/16

Derwent Class: P36; P52; W04

International Patent Class (Main): A63H-003/20; A63H-013/00

International Patent Class (Additional): A63H-003/00; A63H-003/28;  
A63H-003/36 ; A63H-011/00

15/7/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

010706552 \*\*Image available\*\*

WPI Acc No: 1996-203507/199621

**Eye structure for doll - has opening and shutting mechanism that consists of eye lid drive motor which moves opening and shutting door of eye lid of doll**

Patent Assignee: KANENARI M (KANE-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8071257	A	19960319	JP 94236051	A	19940906	199621 B

Priority Applications (No Type Date): JP 94236051 A 19940906

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8071257	A		5	A63H-003/40	

Abstract (Basic): JP 8071257 A

The eye structure comprises an eye pursuit mechanism that consists of an eye drive motor. The eye drive motor is connected with a rotary body (5) to which an infrared ray detector (6) and lens is provided. The rotary body moves an eye of the doll in the direction of the persons image. An opening and shutting mechanism is provided for an eye lid of the eye. The opening and shutting mechanism consists of an eye lid drive motor that moves the opening and shutting door that acts as an eye lid for the doll.

ADVANTAGE - Simplifies mechanism. Reduces size of toy.

Dwg.2/5

Derwent Class: P36; W04

International Patent Class (Main): A63H-003/40

International Patent Class (Additional): A63H-029/22

15/7/8 (Item 8 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.  
010259650 \*\*Image available\*\*  
WPI Acc No: 1995-160905/199521

Voice-responsive doll's eye mechanism - is designed as replaceable unit provided in toy or doll to simulate communication with child by rotation of eye when spoken to

Patent Assignee: CAPSOUTO S (CAPS-I); NOONY LTD (NOON-N); AVITAL I (AVIT-I); AVITAL N (AVIT-I)

Inventor: AVITAL I; AVITAL N

Number of Countries: 048 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5407376	A	19950418	US 94187519	A	19940128	199521 B
WO 9627416	A1	19960912	WO 95US2531	A	19950303	199642 N
IL 104566	A	19961016	IL 104566	A	19930131	199648
AU 9519742	A	19960923	AU 9519742	A	19950303	199702 N
			WO 95US2531	A	19950303	
EP 821610	A1	19980204	EP 95912657	A	19950303	199810 N
			WO 95US2531	A	19950303	
JP 11501537	W	19990209	WO 95US2531	A	19950303	199916 N
			JP 96526813	A	19950303	

Priority Applications (No Type Date): IL 104566 A 19930131; WO 95US2531 A 19950303; AU 9519742 A 19950303; EP 95912657 A 19950303; JP 96526813 A 19950303

Cited Patents: US 1061965; US 1760318; US 2324774; US 3353296; US 3495351; US 4177589; US 4843497; US 4850930; US 4900289; US 5407376

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

US 5407376	A		13	A63H-030/00	
------------	---	--	----	-------------	--

WO 9627416	A1	E	24	A63H-003/40	
------------	----	---	----	-------------	--

Designated States (National): AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ VN

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE

AU 9519742	A			A63H-003/40	Based on patent WO 9627416
------------	---	--	--	-------------	----------------------------

EP 821610	A1	E		A63H-003/40	Based on patent WO 9627416
-----------	----	---	--	-------------	----------------------------

Designated States (Regional): BE DE ES FR GB

JP 11501537	W		24	A63H-003/40	Based on patent WO 9627416
-------------	---	--	----	-------------	----------------------------

IL 104566	A			A63H-003/38	
-----------	---	--	--	-------------	--

Abstract (Basic): US 5407376 A

When the child speaks to the doll , the mechanism provides eye rotation to simulate a human response. The mechanism comprises control circuitry which receives the voice via a microphone, and converts this into a drive signal which powers a transmission designed as a motor and gears to provide rotation.

A stuffed toy dog may be designed with the mechanism and, when the child calls the dog by its name, the dog responds by moving its eyes . The louder the child speaks to the dog, the faster the eye movement. The voice stimulus/repeated eye response from the toy represents, in effect, "communication" between the child and the toy dog.

ADVANTAGE - Assists in child development by enabling voice-responsive communication involving eye contact as it were.

Dwg.11/13  
Derwent Class: P36; W04  
International Patent Class (Main): A63H-003/38 ; A63H-003/40; A63H-030/00  
International Patent Class (Additional): A63H-003/28; A63H-003/48

15/7/9 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.  
05115757 \*\*Image available\*\*

**EYE STRUCTURE FOR DOLL**

PUB. NO.: 08-071257 [JP 8071257 A]  
PUBLISHED: March 19, 1996 (19960319)  
INVENTOR(s): KANARI MITSUSHIRO  
APPLICANT(s): KANARI MITSUSHIRO [000000] (An Individual), JP (Japan)  
APPL. NO.: 06-236051 [JP 94236051]  
FILED: September 06, 1994 (19940906)

**ABSTRACT**

**PURPOSE:** To move eyes of a mannequin and give an expression to the face by activating an infrared detector when a person approaches, driving motors to rotate rotors, i.e., eyeballs, and operating eyelids after an elapsed time or when the infrared detection signal is abruptly changed.  
**CONSTITUTION:** The image of a person is formed on an infrared detector through a lens 4. When the lens 4 does not face the person, a signal difference is generated between detecting elements 41, 42. The signal causes a current in a coil via an amplifier 43 and a power amplifier 44, and an eyeball driving motor 13 is driven. Periodic signals of a multivibrator 45 normally drive the motors 31, 32 for driving the right and left eyelids periodically via power amplifiers 48, 49. When the person approaches and a signal difference is generated, it is discriminated by a wave-form shaping circuit 46, and the period of the multivibrator 45 is shortened. When the on-signal is inputted via an OR gate 47, the motor 31 for driving the right eyelid is driven, the right eyelid is kept closed, and the right eye winks.

16/7/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Thomson Derwent. All rts. reserv.  
013765103 \*\*Image available\*\*  
WPI Acc No: 2001-249314/200126

**Decorative clock has decorative doll whose eye balls are rotated by motor, in synchronization with hands movement**

Patent Assignee: RHYTHM WATCH CO LTD (RHYT )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001042057	A	20010216	JP 99216213	A	19990730	200126 B

Priority Applications (No Type Date): JP 99216213 A 19990730

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001042057	A		4	G04B-045/00	

Abstract (Basic): JP 2001042057 A

**NOVELTY** - Hands (4-6) are moved by the motor which is operated based on signal from circuit group including oscillating circuit, divider circuit, and drive circuit. Eye balls (8a) of doll in clock are rotated by another motor in synchronization with hand movement.

**USE** - Decorative clock with separate motor for rotating eye balls of

doll.

ADVANTAGE - Enables confirmation of time display performed by each motor . Synchronous operation of motor for rotation of eye balls of decorative doll , with hand movement is enabled.

DESCRIPTION OF DRAWING(S) - The figure shows front view of decorative clock.

Hands (4-6)

Eye balls (8a)

pp; 4 DwgNo 2/3

Derwent Class: S04

International Patent Class (Main): G04B-045/00

International Patent Class (Additional): G04C-003/14

16/7/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

013192152 \*\*Image available\*\*

WPI Acc No: 2000-364025/200031

**Toy Christmas tree drives jaw plate and eyebrow rod intermittently, by rotation of pushing rod via reduction gear**

Patent Assignee: TANG T (TANG-I)

Inventor: TANG T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6053798	A	20000425	US 98140660	A	19980826	200031 B

Priority Applications (No Type Date): US 98140660 A 19980826

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6053798	A		8	A63H-003/28	

US 6053798 A

Abstract (Basic): US 6053798 A

NOVELTY - The transmission device (30) at the lower side of foundation (20), has a motor (31) and reduction gear (32). A pushing rod (33) is located eccentrically at gear side and linked with spring (34). **By the rotation of rod via gear and spring movement, jaw plate (41) and eyebrow (52) are driven up and down intermittently.**

DETAILED DESCRIPTION - The motor is coupled to control circuit board for intermittent drive. The shaft of motor is intermittently driven so that its teeth engages with the gear. The spring is stretched when motor is switched ON and gear is rotated in specific direction. The eyebrow rod and jaw plate are fitted with respect to the foundation.

USE - Toy Christmas tree.

ADVANTAGE - Simple integral construction, reasonable and complete design of all components, effective transmission of force, easy assembling, high production efficiency and use of single motor , allow significant reduction of material and working costs and as well as upgrade product competitiveness. Due to usage of single motor and transmission device, power energy is saved. Improves service life and offers economically efficient product to customers, due to simple transmission mechanism, low power consumption, low trouble rate, etc.

DESCRIPTION OF DRAWING(S) - The figure shows exterior and structural view of toy Christmas tree.

Foundation (20)

Transmission device (30)

Motor (31)



Reduction gear (32)  
Rod (33)  
Spring (34)  
Jaw plate (41)  
Eyebrow (52)  
pp; 8 DwgNo 1,2/4

Derwent Class: P36; W04

International Patent Class (Main): A63H-003/28

16/7/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

011511066 \*\*Image available\*\*

WPI Acc No: 1997-488980/199745

**Modular direct drive motor for arms, legs, eyes and fingers of robot, e.g.**

legged mobile robot - includes rotor having permanent magnet, and tubular arm portion integral with rotor and extending outwardly through slot in stator body which is wound with aluminium@ coil and has tubular motor linking extension

Patent Assignee: UNIV NEW YORK STATE (UYN Y )

Inventor: HANSEN F B; WALLACE R S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5672924	A	19970930	US 96704300	A	19961015	199745 B

Priority Applications (No Type Date): US 96704300 A 19961015

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5672924	A	9	H02K-001/27	

Abstract (Basic): US 5672924 A

The motor comprises the rotor having at least one permanent magnet, the tubular portion which holds the permanent magnet, and the arm which extends perpendicularly outwardly from the tubular portion. The stator has a body member with a casing wall, at least one electromagnetic aluminium rectangular cross-section coil wound around the body member, and an opening in the casing wall.

A shaft rotatably connects the stator to the rotor. A first linkage is provided on the body member and a second linkage is provided on the arm for attaching the motor between two other motors with an arbitrary twist angle. The arm is tubular and has a free end adapted to be inserted into a tubular linkage device on another stator.

USE/ADVANTAGE - Provides lightweight open magnetic circuit motor capable of functioning as joints in direct walking machine, or capable of operating remote controlled toy, airplane or vehicle or to move eyes and fingers of robot. Economical in use of power and may be operated for prolonged period without recharging its battery.

Dwg.1/6

Derwent Class: V06; X25

International Patent Class (Main): H02K-001/27

International Patent Class (Additional): H02K-003/46; H02K-033/12

16/7/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

011409104 \*\*Image available\*\*

WPI Acc No: 1997-387011/199736

**Toy figure with movable eyes and mouth - has drive with two motors behind face, one to operate eyes via slider, other to operate chin and open mouth via sprung gear**

Patent Assignee: LEE W (LEEW-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 29708466	U1	19970731	DE 97U2008466	U	19970513	199736 B

Priority Applications (No Type Date): DE 97U2008466 U 19970513

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 29708466	U1	15		

Abstract (Basic): DE 29708466 U

The figure consists of a rigid animal or human face (10) with two eyes (12), on a support (14) and a movable chin (11). A drive (13) with two motors (28,29) is located behind the face. One (28) motor is connected to a gear (30) with a side plate (33). The gear's shaft (31) engages into an element (37) in the drive's housing (25).

The element has a shaft (39) which engages into a return spring (42) which presses against a pin (36) on the side plate and one (38) on the element. A drive rod (45) on the side plate is connected to the chin to open the mouth. The other motor (29) drives a cylinder wheel (55) with a slider (59). The wheel has a cam (56) which engages into a groove (62) in the slide, which has two drive shafts (60) to operate the eyes .

ADVANTAGE - The face is life like.

Dwg.2/7

Derwent Class: P36

International Patent Class (Main): A63H-013/00

16/7/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

011200255 \*\*Image available\*\*

WPI Acc No: 1997-178180/199716

**Toy set of fishing play - includes casing having animal contour inside which there is arranged driving mechanism and number of toothed rotary trays, with driving mechanism driving various gear sets, which are linked with eyeballs and limbs of fake animal**

Patent Assignee: CHUANG C (CHUA-I)

Inventor: CHUANG C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5609340	A	19970311	US 96599366	A	19960311	199716 B

Priority Applications (No Type Date): US 96599366 A 19960311

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5609340	A	8	A63F-009/00	

Abstract (Basic): US 5609340 A

The toy set includes a casing inside which there is arranged a driving mechanism and a number of toothed rotary trays for fishing play, where the driving mechanism drives gear sets to activate an eyeball moving mechanism and limb moving mechanisms via connecting rods. The casing has an animal's form and contains a motor that is used to drive a worm of the driving mechanism. The driving mechanism

delivers the power of the motor to a driving gear of a first gear set so that a driven gear, engaged with the driving gear, uses an eccentric pin to spur a connecting rod to move up and down eyeballs affixed to the eyeball moving mechanism.

The driven gear of the first gear set further rotates a first toothed rotary tray, which causes a driving gear of a second gear set and a central gear to turn so that an eccentric pin of a driven gear of the second gear set pushes the first limb-shaped parts to sway. The central gear concurrently drives a number of toothed rotary trays to operate, of which a second rotary tray also turns a driving gear of a third gear set so that an eccentric pin on the driven gear of the third gear set sets the second limb-shaped parts in motion.

ADVANTAGE - Offers greatest pleasure in visual effect beside providing a very interesting fishing game.

Dwg.5/5

Derwent Class: P36

International Patent Class (Main): A63F-009/00

16/7/9 (Item 9 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2002 Thomson Derwent. All rts. reserv.

001530722

WPI Acc No: 1976-K3659X/197643

Toy doll with mechanically simulated movements - has battery powered internal motor driving oscillating linkages.

Patent Assignee: BELLA SA (BELL-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2293955	A	19760813				197643 B

Priority Applications (No Type Date): FR 7440748 A 19741211; FR 7630081 A 19761006

Abstract (Basic): FR 2293955 A

The doll 's head (1) is hollow and moulded from flexible plastic, at least one mouth and eyes . The mouth has an opening (23), with a tube (22) connected to a strip (26, 27) behind each lip, both articulated (19) to one end (18) of a bent link (10). The other end passes through the neck (3) into the body (2), having a slot over an eccentric disc (9). **This is driven by a worm and wormwheel (11, 12) from a battery operated motor (7, 16) in the body.** Inserting a dummy in the mouth closes the contacts and the link oscillates to simulate sucking. **Similar linkages can move the eyes and operate a tear-producing mechanism.**

Derwent Class: P36

International Patent Class (Additional): A63H-003/24

File 350:Derwent WPIX 1963-2002/UD,UM &UP=200245

File 344:CHINESE PATENTS ABS MAY 1985-2002/MAY

File 347:JAPIO Oct 1976-2002/Mar(Updated 020702)

File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
-----	-------	-------------

S1	72753	EYE OR EYES OR EYEBALL? ? OR EYEBROW? ?
----	-------	---

S2	28151	DOLL OR DOLLS OR TOY? ? OR PUPPET? ? OR MARIONETTE? OR MARIONETTE?
----	-------	--

S3	1238578	MOTOR?
----	---------	--------

S4	15130	POWER() (UNIT OR UNITS)
----	-------	-------------------------

S5 1048233 PIVOT???? OR TURN????  
S6 1649236 SWING???? OR ROTAT?????  
S7 1598394 MOVE? ? OR MOVING OR MOVABLE OR MOVEABLE  
S8 981 IC='A63H-003/36':IC='A63H-003/42'  
S9 527 IC='A63H-013/02'  
S10 1250048 S3:S4  
S11 3495254 S5:S7  
S12 616 S1 AND S2  
S13 2259 S1(3N)S5:S7  
S14 19 S12 AND S13 AND S10  
S15 9 S14 AND S8:S9  
S16 10 S14 NOT S15

14/6,K/4 (Item 3 from file: 349)

DIALOG(R)File 349:(c) 2002 WIPO/Univentio. All rts. reserv.

00838214 \*\*Image available\*\*

VIBRATORY MOTOR AND METHOD OF MAKING AND USING SAME

Publication Year: 2001

Detailed Description

... a variety of products that require movement of small parts by simple motors.

The vibratory motor 26 is especially useful for toys due to advantageously low cost, small size and low noise. **Dolls could have limbs moved and eye lids actuated by the motors 26...**

14/6,K/5 (Item 4 from file: 349)

DIALOG(R)File 349:(c) 2002 WIPO/Univentio. All rts. reserv.

00825318 \*\*Image available\*\*

ANIMATED TOY FIGURE RESTING UPON AND RESPONSIVE TO COMPUTER MONITOR

Publication Year: 2001

Detailed Description

... In accordance with the present invention, there is provided a light-responsive toy figure for use with a computer monitor having a light-emitting display. screen, the toy comprising: a housing constructed to rest upon a computer monitor having an aperture and a downwardly extending portion; a faceplate supported on the housing and defining eye apertures; **a movable eye plate having eye images thereon slidably supported within the housing behind the aperture; a motor having gear means for moving the eye plate to move the eye images behind the eye apertures;** a light sensor supported in the downwardly extending portion; a motor controller responsive to the light sensor to energize the motor .

Brief Description of the Drawings

Claim

... an aperture and a downwardly extending portion; a faceplate supported on said housing and defining' eye apertures; **a movable eye plate having eye images thereon slidably supported within said housin4 behind said aperture; a motor having gear means for moving said eye plate to move said eye images behind said eye apertures;** a light sensor supported in said downwardly extending portion; a motor controller responsive to said light sensor to energize said motor.

14/3,AB,K/1 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2002 European Patent Office. All rts. reserv.

00694939

Talking toy doll

Sprechpuppe  
Poupee parlante  
PATENT ASSIGNEE:

FUNG SENG INDUSTRIAL CO., LTD, (1770400), Jing Ho Industrial Building,  
14/FL., 78-84, Wang Lung Street, Tsuen Wan, N.T. Kowloon, (HK),  
(applicant designated states:

AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;NL;PT;SE)

INVENTOR:

Lam, Wing Fan, 50 Carl Crescent, Scarborough, Ontario M1W 3R2, (CA)

LEGAL REPRESENTATIVE:

VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 662331 A2 950712 (Basic)

EP 662331 A3 951102

EP 662331 B1 980603

APPLICATION (CC, No, Date): EP 94104961 940329;

PRIORITY (CC, No, Date): US 169061 931220

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; NL; PT; SE

INTERNATIONAL PATENT CLASS: A63H-003/28;

ABSTRACT EP 662331 A2

A toy doll with lips (35) that move as speech sounds are produced from a speaker (24). Pressing a button (22) on the body of the doll activates an integrated circuit (26) that sends voice signals to the speaker, which transmits the sounds. This in turn actuates a switch, causing a motor (28) to run. The drive shaft of the motor rotates, causing a series of meshing gears to turn. The axle of a said gear that passes through the eccentric bore of an internal cam (30) causes the cam to move so that it forces an L-shaped cam follower (32) to rock back and forth about a pivot point. The rotatable pivot rod is supported by the rigid torso of the doll, and one end of the cam follower is attached to the interior of the doll's flexible face at a point connecting the two lips (35). The rocking of the cam follower causes the lips to close and open in a simulation of talking. **The motor only runs, and consequently the lips only move, at the same time that simulated speech is transmitted from the speaker.** A portion of the doll's rigid body that is interior to its flexible head supports the head and prevents the head and face from collapsing or becoming distorted during operation. (see image in original document)

ABSTRACT WORD COUNT: 225

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
----------------	----------	--------	------------

CLAIMS B	(English)	9823	1034
----------	-----------	------	------

CLAIMS B	(German)	9823	1028
----------	----------	------	------

CLAIMS B	(French)	9823	1185
----------	----------	------	------

SPEC B	(English)	9823	2703
--------	-----------	------	------

Total word count - document A	0
-------------------------------	---

Total word count - document B	5950
-------------------------------	------

Total word count - documents A + B	5950
------------------------------------	------

...SPECIFICATION doll are contained in the head.

**U S Patent No. 4 775 352 discloses a doll with two motors that drive, respectively, movable eyes and movable lips. Each lip has a rod for moving the lip into open or closed positions...**

...that rides the groove are used to move the two rods. The operation of the motor coupled to the lips and the playing of a tape that produces sounds have coordinated...

DIALOG(R) File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.  
00911098

**ACOUSTIC COMMUNICATION SYSTEM**  
SYSTEME DE COMMUNICATION ACOUSTIQUE

Patent Applicant/Assignee:

SCIENTIFIC GENERICS LIMITED, Harston Mill, Harston, Cambridgeshire CB2  
5GG, GB, GB (Residence), GB (Nationality), (For all designated states  
except: US)

Patent Applicant/Inventor:

JONES Aled Wynne, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

REYNOLDS Michael Raymond, Scientific Generics Limited, Harston Mill,  
Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

BARTLETT David, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

HOSKING Ian Michael, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

GUY Donald Glenn, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

KELLY Peter John, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

TIMSON Daniel Reginald Ewart, Scientific Generics Limited, Harston Mill,  
Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

VASILOPOLOUS Nicolas, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GR (Nationality),  
(Designated only for: US)

HART Alan Michael, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

MORLAND Robert John, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

Legal Representative:

BERESFORD Keith Denis Lewis (et al) (agent), Beresford & Co., 2-5 Warwick  
Court, High Holborn, London WC1R 5DH, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200245286 A2 20020606 (WO 0245286)

Application: WO 2001GB5300 20011130 (PCT/WO GB0105300)

Priority Application: GB 200029273 20001130; GB 20011947 20010125; GB  
20011950 20010125; GB 20011952 20010125; GB 20011953 20010125; GB  
20013623 20010213; GB 20016587 20010316; GB 20016778 20010319; GB  
20017124 20010321; GB 20018205 20010402; GB 200114715 20010615; GB  
200127013 20011109

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 35929

English Abstract

There is described a number of encoders for encoding a data signal within an audio signal. In some of the encoders, the audio signal is separated into a tonal part and a residual part, and the data signal is shaped based on the residual part. In other encoders, the data signal is separated into a tonal part and a residual part, and the data signal is combined with the audio signal independence upon the residual part. In other encoders, the rate at which the data is encoded within the audio signal is varied in dependence upon the audio signal. There are also described various decoders associated with the described encoders.

Detailed Description

... with the control signal which causes the processor 497 to output a signal to the motor drive circuit 503,, causing the motor drive circuit 503 to drive the eyebrows motor 505 to move the articulated eyebrows 447,, and outputs a signal to the second motor drive circuit 507 causing the second motor drive circuit 507 to output a drive signal to the mouth motor 509 to move the articulated mouth 445. In this way, the desired expression corresponding to...

...30,, the control signal associated with the user 423 causes the facial expression of the toy 425 to become a frown, and the audio signal associated with the user 423 is...

14/3,AB,K/3 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00911085

COMMUNICATION SYSTEM

SYSTEME DE COMMUNICATION

Patent Applicant/Assignee:

SCIENTIFIC GENERICS LIMITED, Harston Mill, Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

JONES Aled Wynne, Scientific Generics Limited, Harston Mill, Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality), (Designated only for: US)

REYNOLDS Michael Raymond, Scientific Generics Limited, Harston Mill, Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality), (Designated only for: US)

BARTLETT David, Scientific Generics Limited, Harston Mill, Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality), (Designated only for: US)

HOSKING Ian Michael, Scientific Generics limited, Harston Mill, Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality), (Designated only for: US)

GUY Donald Glenn, Scientific Generics Limited, Harston Mill, Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), US (Nationality), (Designated only for: US)

KELLY Peter John, Scientific Generics Limited, Harston Mill, Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),

(Designated only for: US)  
TIMSON Daniel Reginald Ewart, Scientifics Generics Limited, Harston Mill,  
Harston, Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)  
VASILOPOLOUS Nicolas, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GR (Nationality),  
(Designated only for: US)  
HART Alan Michael, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)  
MORLAND Robert John, Scientific Generics Limited, Harston Mill, Harston,  
Cambridgeshire CB2 5GG, GB, GB (Residence), GB (Nationality),  
(Designated only for: US)

Legal Representative:

BERESFORD Keith Denis Lewis (et al) (agent), Beresford & Co., 2-5 Warwick  
Court, High Holborn, London WC1R 5DH, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200245273 A2 20020606 (WO 0245273)  
Application: WO 2001GB5306 20011130 (PCT/WO GB0105306)  
Priority Application: GB 200029273 20001130; GB 20011947 20010125; GB  
20011953 20010125; GB 20015869 20010309; GB 20016587 20010316; GB  
20016778 20010319; GB 20017124 20010321; GB 200111016 20010504; GB  
200114714 20010615; GB 200127013 20011109

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 36104

English Abstract

There is described a communication system in which data is received by  
and/or transmitted to a telecommunications apparatus using an acoustic  
data channel. In embodiments, the data is encoded within the audio track  
of a media broadcast or other public broadcast. The invention has  
particular, but not exclusive, relevance to a cellular communication  
system. There are also described acoustic position detection systems for  
determining the position of a telecommunications apparatus.

Detailed Description

... with the control signal which causes the processor 497 to output a signal  
to the motor drive circuit 503, causing the motor drive circuit 503 to drive  
the eyebrows motor 505 to move the articulated eyebrows 447, and outputs a  
signal to the second motor drive circuit 507 causing the second motor drive  
circuit 507 to output a drive signal to the mouth motor 509 to move the  
articulated mouth 445, In this way, the desired expression corresponding to...  
...16, the control signal associated with the user 423 causes the facial  
expression of the toy 425 to become a frown, and the audio signal associated  
with the user 423 is...

14/3,AB,K/6 (Item 5 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.



00748122

CLUTCH ACTUATED BY SHAPE ALTERING MATERIAL  
EMBRAYAGE COMMANDE PAR UN MATERIAU A CHANGEMENT DE FORME

Patent Applicant/Inventor:

CHUNG Caleb, 3460 Plantation River Drive, Boise, ID 83703, US, US  
(Residence), US (Nationality)

Legal Representative:

MARANTIDIS Constantine, Christie, Parker & Hale, LLP, P.O. Box 7068,  
Pasadena, CA 91109-7068, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200061254 A1 20001019 (WO 0061254)

Application: WO 2000US10107 20000414 (PCT/WO US0010107)

Priority Application: US 99129519 19990414

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 21294

English Abstract

The present invention provides various clutch/gear assemblies (16, 18, 20) that can be driven by a single motor (12). The clutch/gear assemblies (16, 18, 20) comprise a smart material which changes shape when supplied with energy, e.g., current or heat. The smart material achieves one of a first or a second shape when supplied with energy, and achieves the other shape when it is not supplied with energy. When the smart material achieves a first shape it causes a clutch surface of the clutch/gear to engage and be driven by a shaft coupled to the motor (12) and when the smart material achieves a second shape it allows the clutch surface to disengage from the shaft.

Detailed Description

... is a **cross-sectional view showing mechanisms for moving the mouth and eyes of a toy doll using the motor and clutch/gear assembly shown...**

14/3,AB,K/7 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00732933

**MOBILE TALKING TOY HAVING MOVABLE FEATURES**

JOUET PARLANT MOBILE A ELEMENTS MOBILES

Patent Applicant/Assignee:

TOYMAX INC, 125 East Bethpage Road, Plainview, NY 11803, US, US  
(Residence), US (Nationality)

Inventor(s):

RUSSO Carmine, 4 Anna Court, West Islip, NY 11795, US

Legal Representative:

NATOLI Anthony J, Brown Raysman Millstein Felder & Steiner, LLP, 120 West  
Forty-Fifth Street, New York, NY 10036, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200045920 A1 20000810 (WO 0045920)

Application: WO 2000US2878 20000204 (PCT/WO US0002878)

Priority Application: US 99118909 19990205  
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA  
UG UZ VN YU ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 3249

English Abstract

**A mobile toy (10) includes speech messages and movable features which may include a movable mouth (26), so that the toy (10) gives the illusion, at least to a pre-schooler, of the toy talking, and/or, otherwise, gives entertainment and amusement. Other features that may be made movable are eyes (24). The speech and movement of the feature(s) may be made independent of motion of the toy, or movement of the features dependent upon or synchronized with movement of the toy. The speech may be manually initiated or in response to motion of the toy or of the movable feature(s). The mobile toy (10) may be controlled by remote control or directly by controls on the toy activated in any suitable way; the toy may be self-propelled (by an electric motor or spring mechanism) or free-rolling. The toy in the preferred embodiments is a vehicle.**

Detailed Description

**... reciprocally pivot about the pivot shaft 72 thereby moving the lower lip 36 while simultaneously moving each eye 24. During the operation of the mouth-like opening**

14/3,AB,K/9 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.  
00344903

**VOICE-RESPONSIVE DOLL EYE MECHANISM**

**MECANISME D'OEIL DE POUPEE REAGISSANT A LA VOIX**

Patent Applicant/Assignee:

NOONY LTD,  
CAPSOUTO Samuel,

Inventor(s):

AVITAL Noni,  
AVITAL Iko,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9627416 A1 19960912  
Application: WO 95US2531 19950303 (PCT/WO US9502531)  
Priority Application: WO 95US2531 19950303

Designated States: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR KZ  
LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ VN AT BE CH DE DK ES FR GB  
GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 3740

English Abstract

**A doll eye mechanism (24) responsive to the voice and designed as replaceable unit provided in a toy or doll (75) to simulate communication with a child. When the child speaks to the doll, the**

mechanism provides eye rotation to simulate a human response. The mechanism comprises control circuitry (32) which receives the voice as an input to a microphone (22), and converts this into a drive signal which powers a transmission designed as a motor (30) and gears (92, 94, 96, 97) to provide rotation.

Detailed Description

... rolling weighted doll eye is disclosed in US Patent 3,590,521 to Samo. Other moving doll eye mechanisms are disclosed in US Patents 3,550,315 to Samo, 3,462,875 to May, and 3,421,255 to Brudney. A doll with limb and eye movements is disclosed in US Patent 3,964,205 to Kuramochi...shown an exploded perspective view of an eye rotation mechanism 24 for use in the toy car 10 of Fig. 1. Mechanism 24 comprises a bracket 26 mounted to front end 20, with a lower end shaped as a holder 28 for battery 29. A motor 30 is mounted on bracket 26 in motor housing, and motor 30 is connected so as to receive power and control signals from control circuitry 32...Fig. 4, another toy embodiment is shown as a cookie jar 60 featuring a modified eye rotation mechanism 24 (Fig. 5). Motor 30 is mounted on a plate 61 behind bracket 26, and shaft 36 is provided...

...lid 66 on a cookie jar 60. As before, when microphone 22 detects a voice, motor 30 rotates and shaft 36 drives the rotation of eye elements 18, while rod 64 moves with reciprocating vertical motion, opening and closing jar 60...

Claim

... voice-responsive doll eye mechanism comprising: a housing supporting a pair of side-to-side rotatable doll eye elements; rotatable transmission means mounted in said housing and coupled to said eye elements to enable side-to-side rotation thereof, wherein said rotatable transmission means comprises: a motor arranged to drive rotation of a threaded shaft; a nut threaded on said shaft for...

...arms connected to opposite ends of said connecting arm and coupled to said pair of rotatable eye elements for providing side-to-side rotation thereof as said shaft rotates and said connecting...

...voice-responsive doll eye mechanism comprising:  
a housing supporting a pair of side-to-side rotatable doll eye elements;  
rotatable transmission means mounted in said housing and coupled to said eye elements to enable side-to-side rotation thereof, wherein said rotatable transmission means comprises:

a motor arranged to drive rotation of a threaded shaft; a nut threaded on said shaft for...

...arms connected to opposite ends of said connecting arm and coupled to said pair of rotatable eye elements for providing side-to-side rotation thereof as said shaft rotates and said connecting...

14/3,AB,K/10 (Item 9 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.  
00224750  
APPARATUS FOR DETECTING AND TRACKING AN OBJECT  
APPAREIL SERVANT A DETECTER ET A SUIVRE UN OBJET  
Patent Applicant/Assignee:  
PRINEPPI Frank Joseph,  
Inventor(s):  
PRINEPPI Frank Joseph,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9221992 A1 19921210  
Application: WO 92AU257 19920604 (PCT/WO AU9200257)  
Priority Application: GB 9112260 19910607

Designated States: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CS DE DE  
DK DK ES ES FI FR GA GB GB GN GR HU IT JP KP KR LK LU LU MC MG ML MN MR  
MW NL NL NO PL RO RU SD SE SE SN TD TG US

Publication Language: English

Fulltext Word Count: 5529

English Abstract

Apparatus for detecting an object within a certain spacial area and for tracking it as the object moves. This is achieved by emitting a signal such as electro-magnetic radiation or ultrasound and by detecting the amount reflected back at two different points. By comparing the amount detected at each point it is possible to ascertain the direction of an object, point the detector at it and follow it if it moves. This can be used in the eyes of a doll, or in a toy weapons system, following someone around a room.

Detailed Description

... it is moving whilst in the spatial area by providing that the actuator means continuously moves the eyes to a position wherein the signals generated by the detector means are generally equal, . i...

...the present invention to- provide a mechanism whereby during tracking movement the head of the doll ,, or some other analogous part if the apparatus if not included in a doll, is adapted to move, preferably by being rotated left or right, as the case may...

...eye movement is reached, there is preferably provided a linkage between the body of the doll and the head which is also connected to the actuator means, which, in turn, is connected to each eye. The linkage may be connected to the body of the doll by means of a motor within the body of the doll which may

conveniently comprise part of the actuator means according to the invention. The drive shaft from the motor may be connected to a main shaft lever arranged such that the eyes are permitted to move leftwards or rightwards within a certain range of movement and, thereafter, a stop mechanism on the drive shaft may prevent the eyes from moving further and may instead transfer the rotational forces to the head of the doll to thereby permit the head to move with the eyes being stationary within the head relative to it\*

The invention will now be described., by...

...suitable for driving a pair of detectors, 15 which may be in the form of dolls eyes, in accordance with an aspect of the ...incorporating radiation transmission and detector means and suitable for incorporation within the head of a doll , Figure 3 is a side view of one of the eyes of...

...eyes is shown in cross section, Figure 7 is a part sectional view of a dolls head showing the eyes turning left...

15/6/3 (Item 3 from file: 349)  
00538083 \*\*Image available\*\*  
THE CONTROL OF TOYS AND DEVICES BY SOUNDS  
Publication Year: 2000

15/6/4 (Item 4 from file: 349)  
00522663 \*\*Image available\*\*  
INTERACTIVE TOY  
Publication Year: 1999

15/6/6 (Item 6 from file: 349)  
00420387 \*\*Image available\*\*  
DOLL WITH DISPLAY DEVICE  
Publication Year: 1998

15/6/7 (Item 7 from file: 349)  
00330802 \*\*Image available\*\*  
DOLL HAVING MAGNETICALLY ACTUATED FUNCTIONS  
Publication Year: 1996

15/3,AB/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.  
00816141

TOYS INCORPORATING GENEVA GEAR ASSEMBLIES  
JOUETS INTEGRANT DES ENSEMBLES DE MECANISMES A CROIX DE MALTE

Patent Applicant/Inventor:

CHUNG Caleb, 3460 Plantation River Drive, Boise, ID 83703, US, US

(Residence), US (Nationality)

Legal Representative:

MARANTIDIS Constantine (agent), Christie, Parker & Hale, P.O. Box 7068,  
Pasadena, CA 91109-7068, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200149383 A1 20010712 (WO 0149383)

Application: WO 2001US60 20010102 (PCT/WO US0100060)

Priority Application: US 99173977 19991230; US 2000175445 20000104; US  
2001752652 20010102

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 11676

English Abstract

Toys including multiple moving parts include geneva gear assemblies, wherein each gear assembly is driven by a single motor. Each geneva gear assembly comprises a first drive gear (10) coupled to the motor, the first drive gear having a first set of teeth (16) around a portion thereof, and a first stop surface (18) around a portion thereof. A first output gear (12) comprises a set of teeth (13) for coupling with the teeth of the first drive gear, and a stop tooth (20A) for engaging the first stop surface and locking the first output gear from rotating. A second output gear (14) comprises a set of teeth (15) for coupling with the teeth of the first drive gear, and a stop tooth (22A) for engaging the first stop surface and locking the second output gear from rotating. Connecting lines (80) extend from the first and second output gears to effect movement of parts of the toy.

15/3,AB/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.  
00732932

DOLL HAVING EYE MOVEMENT RESPONSIVE TO LIMP MOVEMENT

POUPEE A MOUVEMENT OCULAIRE REAGISSANT AUX MOUVEMENTS DE DEMARCHE

Patent Applicant/Assignee:

MATTEL INC, 333 Continental Boulevard, El Segundo, CA 90245-5012, US, US

(Residence), US (Nationality)  
Inventor(s):  
WITTENBERG Steven M, 1872 W. Harriet Lane, Anaheim, CA 92804, US  
Legal Representative:  
EKSTRAND Roy A, Mattel, Inc., M/S M1-1518, 333 Continental Boulevard, El  
Segundo, CA 90245-5012, US  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200045919 A1 20000810 (WO 0045919)  
Application: WO 99US26775 19991110 (PCT/WO US9926775)  
Priority Application: US 99245185 19990205  
Designated States: CA MX  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 6259

English Abstract

A doll (10) includes a torso (11), a neck (36), a head (14), and a pivotally coupled arm (12). The head (14) defines a pair of eyes (15, 45) depicting open and closed appearances are pivotally supported behind the apertures (20, 46). A cam (72) driven mechanism is coupled between the pivotable arm and the eye mechanism to cause the doll to present an eyes open or eyes closed appearance as a function of the pivotal position of the arm. A lock mechanism (81) is provided for latching the eyes in an open configuration.

15/3,AB/5 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.  
00498033

A METHOD TO SIMULATE MOVEMENT OF A PORTION (PORTIONS) OF A DOLL, MEANS FOR MANIPULATING TO GIVE A DOLL AN EXPRESSIVE MIMIK AND/OR BODY LANGUAGE, AND A DOLL WITH MIMIK AND/OR A BODY LANGUAGE  
PROCEDE PERMETTANT D'IMITER UN MOUVEMENT D'UNE PARTIE D'UNE POUPEE, DISPOSITIF DE MANIPULATION FAISANT PRENDRE A UNE POUPEE UNE MIMIQUE EXPRESSIVE ET/OU LUI FAISANT EXPRIMER UN LANGAGE CORPOREL ET POUPEE A MIMIQUES ET/OU EXPRESSION D'UN LANGAGE CORPOREL

Patent Applicant/Assignee:  
EGEDIUS-JAKOBSSON Britt-Marie,  
JARENSKOG Ewa,  
BJORKMAN Mats,

Inventor(s):  
EGEDIUS-JAKOBSSON Britt-Marie,  
JARENSKOG Ewa,  
BJORKMAN Mats,

Patent and Priority Information (Country, Number, Date):  
Patent: WO 9929385 A1 19990617  
Application: WO 98SE2127 19981123 (PCT/WO SE9802127)  
Priority Application: SE 974285 19971121  
Designated States: AU BR CA CN CU HU ID IL JP KR LT LV MX NO PL RO RU SG UA  
US VN AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 2560

English Abstract

The present invention relates to a method to give a doll a capacity to express itself. The invention is characterized in that the doll which is defined by a formable outer envelope consisting of several form cut and

connected pieces of textil material having a greater transverse flexibility compared to its longitudinal flexibility, is filled with a resilient filling, and that manipulating means are arranged with an extension between said outer envelope and the inside of the doll to model the outer envelope to give the doll a static or dynamic mimik and/or an expression (gesture) of the body.

18/3,AB/1 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.  
00416009

**EMOTIONAL EXPRESSION CHARACTER**

PERSONNAGE EXPRIMANT DES EMOTIONS

Patent Applicant/Assignee:

FISHER-PRICE INC,

Inventor(s):

CIMERMAN Christopher D,

LONG Jennifer M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9806470 A1 19980219

Application: WO 97US14081 19970812 (PCT/WO US9714081)

Priority Application: US 96696639 19960814

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES  
FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW  
MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN GH KE LS MW  
SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE  
IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 9366

English Abstract

**A child's toy is disclosed that provides for a character that is capable of both visually and audibly displaying a variety of emotional expressions** and which is capable of providing these displays in combination with playing a "peek-a-boo" game with the toy character. The toy has a housing that is shaped like a teddy bear, with openings for the bear's eyes and mouth and a pair of paws that rotate to a position where both paws cover the eyes of the bear when mechanically activated by the child. The paws are mechanically interconnected to a disk mounted within the housing which contains different representations for the eyes and the mouth of the bear, each of which is configured to represent a different emotional expression, on its front surface. The representation for the eyes and the mouth of the bear appear through the eye and mouth openings in the bear's face. **The face disk is rotated such that when the paws rotate to their position in front of the face of the bear, a different emotional expression representation for the eyes and the mouth is presented through the housing openings for the eyes and the mouth.** When the paws move back to a position away from the face of the bear, the changed emotional expression representation for the eyes and the mouth are now visible to a child. The toy also produces an audible emotional expression representation in conjunction with the visual emotional expression. The visual and audible expression displays are coordinated such that, in combination, they provide and appropriate representation for a specific emotional state (e.g. sad, happy, sleepy, etc.).

18/3,AB/2 (Item 2 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00291533

TOY ASSEMBLY

JOUET

Patent Applicant/Assignee:

THE FROMM GROUP INC,

Inventor(s):

FROMM Wayne G,  
WEINSTEIN Leo D,  
MERRY Steven E,  
NIELSON Peter M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9509682 A1 19950413

Application: WO 94CA523 19940926 (PCT/WO CA9400523)

Priority Application: US 93130681 19931001

Designated States: CA CN JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 4441

English Abstract

A toy assembly (10) including a ray gun (12) capable of projecting a focused beam of light (25), and an electromechanically actuatable target figurine (14) including a body (46), a support (48) for supporting the body of the figurine in an upright position upon a surface, a light receiver (58), a toppling mechanism (60) for causing the figurine to topple over when operated, an energy source (82) within the figurine for powering the toppling mechanism, and a control circuit (78) for initiating the operation of the toppling mechanism when the light receiver is struck by a beam of light projected by the ray gun.

File 348:EUROPEAN PATENTS 1978-2002/Jul W01

File 349:PCT FULLTEXT 1983-2002/UB=20020711,UT=20020704

Set	Items	Description
S1	61500	EYE OR EYES OR EYEBALL? ? OR EYEBROW? ?
S2	14401	DOLL OR DOLLS OR TOY? ? OR PUPPET? ? OR MARIONETTE? OR MAR- IONNETTE?
S3	216778	MOTOR?
S4	4403	POWER() (UNIT OR UNITS)
S5	485918	PIVOT???? OR TURN????
S6	408246	SWING???? OR ROTAT?????
S7	17230	MOTORI???
S8	453720	MOVE? ? OR MOVING OR MOVEABLE OR MOVABLE
S9	42	IC='A63H-013/00'
S10	82	IC='A63H-003/36':IC='A63H-003/40'
S11	34	(S5 OR S6 OR S8) (3N) S1(S) S2
S12	223121	S3 OR S4 OR S7
S13	19	S11 AND S12
S14	10	S11(S) S12
S15	9	S13 NOT S14
S16	122	S9:S10
S17	7	S1(S) S3 AND S9:S10
S18	2	S17 NOT S13